Coal Ash Release Fact Sheet

Revised February 11, 2014

The Virginia Department of Health (VDH) is working with Duke Energy, federal, state and local government agencies to protect the health of residents in Pittsylvania, Halifax and Mecklenburg counties. The information below informs people about the recent coal ash spill in Eden, N.C., and provides up-to-date information on VDH's role in responding to the event.

What happened?

The city of Danville was notified by Duke Energy at 6 pm on Sunday, February 2, 2014 of a release of coal ash into the Dan River approximately 15 to 20 miles upstream. The city of Danville water treatment plant operators noticed an increase in turbidity (measure of water cloudiness) in raw (untreated) water from the Dan River at around 11pm on Sunday, February 2, 2014. A press release from Duke Energy, the company that operates the coal plant, was released on February 4, 2014 https://www.duke-energy.com/power-plants/coal-fired/dan-river-response.asp. Additional information is available from the N.C. Department of Environment and Natural Resources: http://portal.ncdenr.org/web/guest/dan-river-spill.

What is being done to address this event?

The city has been able to treat the water primarily through filtration. Raw and finished water samples are being collected and analyzed several times a day, and ongoing results indicate that the treated water is safe to drink. The majority of the color resulting from the coal ash has passed, but there is still enough present to tint the river gray or dark green.

What is coal ash?

Coal ash is made of minerals, just like those in soil and rocks. It is a gray, powdery material that is leftover after coal is burned. Coal fly ash is collected with air pollution control equipment at power plants and is often kept wet (in holding ponds) to prevent it from getting into the air.

Is exposure to coal ash likely to cause harm?

In general, coal ash may contain the following metals: aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, thallium, tin, titanium, vanadium, and zinc. Exposure to coal ash can occur through contact with the skin, accidental ingestion, and inhalation. Short-term exposure to coal ash is unlikely to have any adverse health effects. In addition, we do not expect any long-term exposure to harmful chemicals to occur from this spill. VDH is working with federal, state, and local agencies to evaluate available sampling data and keep residents informed.

Is my drinking water safe?

At this time, water results indicate that Danville's drinking water meets drinking water standards. If you have a private well and live in Virginia, please consult with Southside Health District at (434) 799-5190. If you live in North Carolina and are concerned about your drinking water, please contact the Public Information Officer for N.C. Department of Water Resources at (919) 707-9014.

Is the Dan River safe to use for recreation?

VDH recommends exercising caution when using the Dan River for primary contact purposes (swimming, boating, kayaking, etc). River water is being monitored for any coal ash contaminants. The monitored levels do not indicate that accidental ingestion (or acute exposure) of river water will result in

any illness. However, direct contact with coal ash may cause minor skin irritation. Avoid contact with submerged or floating ash and if ash is contacted, wash off with soap and water.

Is it safe to eat fish from the Dan River?

Due to historical activities not related to the coal ash spill, VDH has an existing fish consumption advisory that extends from Danville to the Kerr Reservoir (Virginia side) and includes parts of the Hyco River and Banister River. These river segments contain species of fish with elevated levels of methylmercury and polychlorinated biphenyls (PCBs). More information is available at www.vdh.virginia.gov/Epidemiology/dee/PublicHealthToxicology/Advisories/

In general, inorganic metals (such as the ones that are found in coal ash) do not significantly build up in fish. However, inorganic mercury can be converted over time to its organic form. The organic form, methylmercury, can accumulate in fish. A measureable increase in methylmercury in fish tissue would likely take several years and would depend on the ongoing levels of mercury present in the water body. VDH will work closely with local, state, and federal agencies to evaluate any available fish tissue data in the future and will update our fish consumption advisories as needed.

Is it safe for farm animals to drink from the river?

At this time, there is no risk to livestock or horses. The river water sampling results (for various metals) are several orders of magnitude below which could cause clinical illness in livestock or horses.

What is VDH doing to protect my health?

Several VDH offices, including the Office of Drinking Water and the Office of Epidemiology, will continue to work together to assess sampling results and determine if there are any risks to Virginia residents.

Who do I contact with questions?

Contact VDH's Danville Field Office for the Office of Drinking Water at (434) 836-8416 with drinking water concerns. You may also contact VDH's Division of Environmental Epidemiology at (804) 864-8111 with questions about coal ash or health effects. If you still have concerns about your health after speaking with VDH, tell your health care provider and provide them with this fact sheet to make sure they have up-to-date information regarding the spill.